

ABSTRACT OF THE DISCLOSURE

Generally described, a bending stiffness predicting system 20 includes a density measurement sub-system 24 and a sound wave velocity measurement sub-system 28. From the measurements of both density and speed of sound through the wood product received from the sub-systems 24 and 28, respectively, the bending stiffness (Y) may be predicted by calculating the bending stiffness (Y) according to the bending stiffness (MOE) equation: $Y = k\rho V^2/g$; wherein k is the calibration constant, ρ is the density or specific gravity of the member, V is the velocity of a sound through the member and g is the acceleration due to gravity. The calculation of wood product bending stiffness may be carried out manually, or may be calculated using a calculating sub-system 32 from the two measured values, density and velocity, according to Equation 1 above.